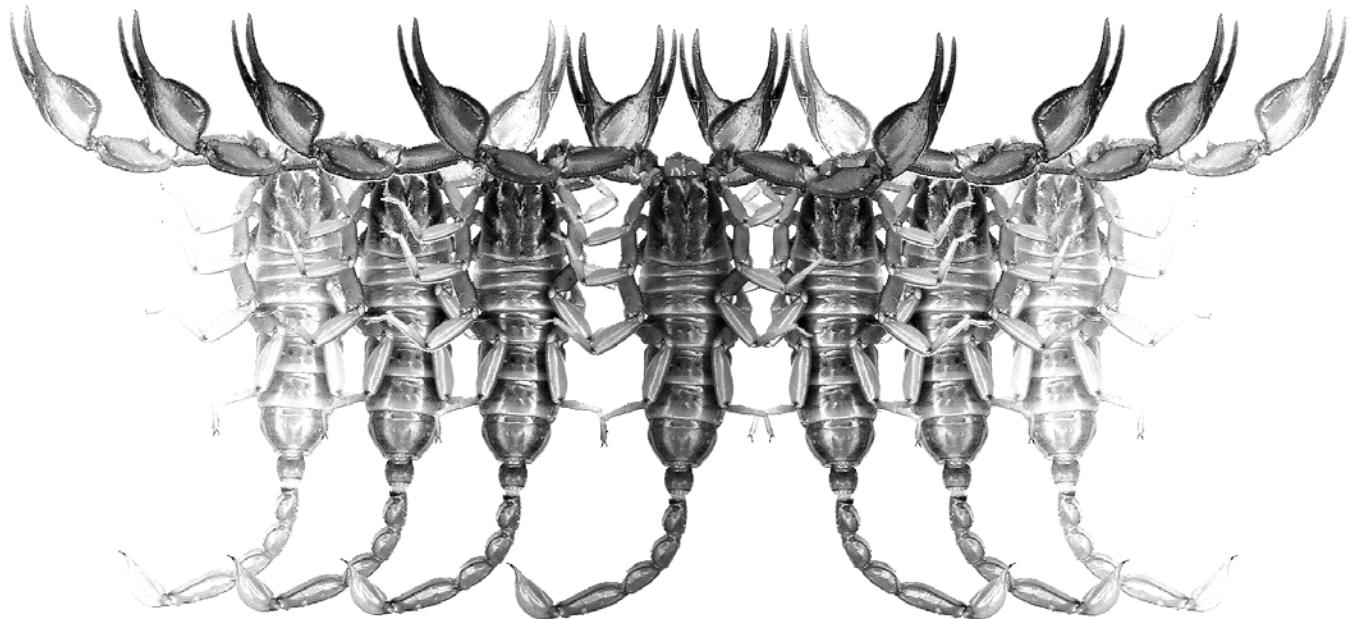


# *Euscorpius*

Occasional Publications in Scorpiology



**A New Case of Duplication of the Metasoma and Telson  
in the Scorpion *Euscorpius flavicaudis* (DeGeer, 1778)  
(Euscorpiidae)**

**Wilson R. Lourenço & Florian Hypolite**

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## Occasional Publications in Scorpiology

*EDITOR: Victor Fet*, Marshall University, ‘[fet@marshall.edu](mailto:fet@marshall.edu)’

*ASSOCIATE EDITOR: Michael E. Soleglad*, ‘[soleglad@la.znet.com](mailto:soleglad@la.znet.com)’

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The name *Euscorpius* Thorell, 1876 refers to the most common genus of scorpions in the Mediterranean region and southern Europe (family Euscorpiidae).

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- **MNHN**, Museum National d'Histoire Naturelle, Paris, France
- **NMW**, Naturhistorisches Museum Wien, Vienna, Austria
- **BMNH**, British Museum of Natural History, London, England, UK
- **MZUC**, Museo Zoologico “La Specola” dell’Universita de Firenze, Florence, Italy
- **ZISP**, Zoological Institute, Russian Academy of Sciences, St. Petersburg, Russia
- **WAM**, Western Australian Museum, Perth, Australia
- **NTNU**, Norwegian University of Science and Technology, Trondheim, Norway
- **OUMNH**, Oxford University Museum of Natural History, Oxford, UK
- **NEV**, Library Netherlands Entomological Society, Amsterdam, Netherlands

# A new case of duplication of the metasoma and telson in the scorpion *Euscorpius flavicaudis* (DeGeer, 1778) (Euscorpiidae)

Wilson R. Lourenço <sup>1</sup> & Florian Hypolite <sup>2</sup>

<sup>1</sup> Muséum national d'Histoire naturelle, Département de Systématique et Evolution, Section Arthropodes (Arachnologie), CP 053, 57 rue Cuvier 75005, Paris, France; e-mail: arachne@mnhn.fr

<sup>2</sup> 16 rue du Moulin, 05300, Laragne-Montéglise, Hautes-Alpes, PACA, France;  
e-mail: hypolite.florian@gmail.com

The complete duplication of the metasoma and telson in scorpions is a well known anomaly since ancient times (Vachon, 1953), but remains rare. Only a limited number of cases have been reported in the modern literature. Pavesi (1881) described a first case in *Euscorpius germanus* and subsequently other reports were produced, one for *Euscorpius carpathicus* but in particular for several buthid species, namely, *Androctonus crassicauda*, *Buthacus leptochelys*, *Hottentotta alticola*, *Centruroides infamatus*, *Centruroides gracilis*, *Centruroides margaritatus*, *Centruroides exilicauda*, *Centruroides vittatus* and *Centruroides guanensis* (Berland, 1913; Brauer, 1917; Campos, 1918; Franganillo, 1938; Millot & Vachon, 1949; Vachon & Serfaty, 1950; Vachon, 1953; Williams, 1971; Armas, 1977, 1990; Sissom & Shelley, 1995). Brauer (1917), in a very detailed study of 5000 embryos of *Euscorpius carpathicus*, reported 13 individuals presenting anomalies, but only one with a potential duplication of the meta-

soma (Brauer, 1917; Sissom & Shelley, 1995). Vachon and Serfaty (1950) reported an example of double metasoma in *Hottentotta alticola* and proposed an interesting synopsis of the various types of doubled metasomas found in scorpions. This publication, however, was often omitted in subsequent studies.

The specimen presented in this note is a juvenile female of *Euscorpius flavicaudis* (DeGeer, 1778), with a total length of 13 mm, including the telson. It was collected by the junior author, while searching for scorpions in the Alps, during the early summer of 2010, at Laragne-Montéglise, Hautes-Alpes in France.

The two metasomas and telsons are fully formed and the carination of the metasomal segments is normal. The seventh mesosomal segment is abnormal since it accommodates the two metasoma. Looking from dorsal aspect, left metasoma is 100% complete, while right metasoma shows segment I slightly fused with the seventh mesosomal segment. This present report is the first one concerning *E. flavicaudis*.

The specimen died shortly after being collected; however, some pictures were produced by the junior author, while yet in the field. To our knowledge, pictures showing living specimens of scorpion with a double metasoma, are absent from the literature. Such picture is provided in the present note. The preserved specimen is now deposited in the collections of the Muséum national d'Histoire naturelle, Paris.

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**Figure 1:** Juvenile female of *Euscorpius flavicaudis* with a double metasoma.

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